DANE COUNTY DEPT. OF PUBLIC WORKS, HIGHWAY & TRANSPORTATION

1919 Alliant Energy Center Way Madison, Wisconsin 53713 Office: 608/266-4018 ◊ Fax: 608/267-1533 Public Works Engineering Division Public Works Solid Waste Division

ADDENDUM

NOVEMBER 7, 2016

ATTENTION ALL REQUEST FOR BID (RFB) HOLDERS

RFB NO. 316037 - ADDENDUM NO. 3

JAIL SHOWERS & SPLIT PODS IMPROVEMENTS

BIDS DUE: TUESDAY, NOVEMBER 15, 2016, 2:00 PM. DUE DATE AND TIME ARE NOT CHANGED BY THIS ADDENDUM.

This Addendum is issued to modify, explain or clarify the original Request for Bidl (RFB) and is hereby made a part of the RFB. Please attach this Addendum to the RFB.

PLEASE MAKE THE FOLLOWING CHANGES:

1. Table of Contents

Delete current TOC; replace with new TOC, issued with this Addendum.

2. Instructions to Bidders

Page ITB-9 - Item 19.A.5.: After this item, insert the following:

"6. Paint new plumbing chase access doors in Large Pods."

3. Section 01 00 00

Page 2 - Item 1.2.B.5.: After this item, insert the following:

"6. Paint new plumbing chase access doors in Large Pods."

4. Sheet T-1

Modify current Sheet T-1 as follows: in middle, right side, the SHEET INDEX:

Change: "A-2 Shower Liner Details", to: "A-2 Shower Liner Fabrication Details".

Change: "P-1 Notes, Legend & Demolition", to: "P-1 General Plbg. Notes, Demolition Plan & Legend".

Change: "P-4 Isometric Drawings", to: "P-4 Plumbing Isometrics".

Note: Sheet A-2 has not been issued yet.

5. Sheet A-1

Add new Sheet A-1, issued with this Addendum.

If any additional information about this Addendum is needed, please call Scott Carlson at 608/266-4179, carlson.scott@countyofdane.com.

RFB No. 316037 -1 - rev. 02/16

Sincerely,
Scott Carlson
Project Manager

Enclosures:

Table of Contents Sections 08 11 00, 09 67 00, 09 68 13 Sheet A-1

 $H:\Shared\ENGINEERING\ DIVISION\Scott\ Carlson\316037-PSB\ Jail\ Showers\ Construction\03-Addendum\Addendum\3.docx$

RFB No. 316037 - 2 - rev. 02/16

TABLE OF CONTENTS FOR RFB NO. 316037

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

Project Manual Cover Page

Table of Contents

Advertisement for Bids (Legal Notice)

Best Value Contracting Application

Instructions to Bidders

Bid Form

Fair Labor Practices Certification

Sample Public Works Contract

Sample Bid Bond

Sample Performance Bond

Sample Payment Bond

Equal Benefits Compliance Payment Certification Form

General Conditions of Contract

Supplementary Conditions

DIVISION 01 - GENERAL REQUIREMENTS

01 00 00 - Basic Requirements

01 74 19 - Construction Waste Management, Disposal & Recycling

DIVISION 05 - METALS

05 50 00 - Metal Fabrications

DIVISION 08 - OPENINGS

08 11 00 - Metal Doors and Frames

DIVISION 09 - FINISHES

09 67 00 - Fluid Applied Resilient (Resinous) Flooring

09 68 13 - Tile Carpet

09 91 23 - Interior Painting

DIVISION 22 - PLUMBING

22 05 00 - Common Work Results for Plumbing

22 05 15 - Piping Specialties

22 05 23 - General Duty Valves for Plumbing Piping

22 05 29 - Hangers and Supports for Plumbing Piping and Equipment

22 07 00 - Plumbing Insulation

22 11 00 - Facility Water Distribution

22 46 00 - Security Plumbing Fixtures

DIVISION 23 - HEATING, VENTILATING AND AIR CONDITIONING (HVAC)

23 01 30.51 - HVAC Air-Distribution System Cleaning

FIGURE 1

Issued temporarily for reference only. To be removed from set when drawings are complete.

RFB No. 316037 rev. 03/16

DRAWINGS - ALL TO BE ISSUED VIA ADDENDUM

Plot drawings on 24" x 36" (ARCH D) paper for correct scale or size.

- T-1 Title Sheet A-1 3rd & 4th Floor Plans
- A-2 Shower Liner Fabrication Details
- P-1 General Plbg. Notes, Demolition Plan & Legend
- P-2 Base Bid Plans
- P-3 Alternate Bids Plans
- P-4 Plumbing Isometrics
- M-1 3rd Floor Duct Locations M-2 4th Floor Duct Locations
- M-3 Penthouse Duct Locations

SECTION 08 11 00

METAL DOORS AND FRAMES

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Pre-assembled, metal reinforced steel entry doors in metal frames.
 - 2. Fire rated and non fire rated assemblies.

1.2 REFERENCE

A. Applicable provisions of Division 01 govern work under this Section.

1.3 REFERENCE STANDARDS

- A. ASTM International:
 - 1. ASTM A653/A653M Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. National Fire Protection Association:
 - 1. NFPA 80 Standard for Fire Doors, Fire Windows.
 - 2. NFPA 252 Standard Methods of Fire Tests of Door Assemblies.
 - 3. NFPA 255 Standard Method of Test of Surface Burning Characteristics of Building Materials.
- C. Underwriters Laboratories Inc.:
 - 1. UL 10B Fire Tests of Door Assemblies.
 - 2. UL 10C Positive Pressure Fire Tests of Door Assemblies.
 - 3. UL 723 Tests for Surface Burning Characteristics of Building Materials.
 - 4. UL 1784 Air Leakage Tests of Door Assemblies.
- D. Uniform Building Code:
 - 1. UBC Standard 7-2 Fire Tests of Door Assemblies.

1.4 SUBMITTALS

- A. Section 01 00 00 Basic Procedures: Requirements for submittals.
- B. Shop Drawings: Indicate elevations, anchor types and spacing, location of cut-outs for hardware, cut-outs and reinforcement for door hardware.
- C. Product Data: Submit frame and door configurations, core materials and finishes.

Addendum No. 3 Bid No. 316037

1.5 QUALITY ASSURANCE

- A. Fire Rated Door and Frame Construction: Conform to NFPA 252.
- B. Installed Fire Rated Door and Frame Assembly: Conform to NFPA 80 for fire rated class of 90 minutes.
- C. Attach label from agency approved by authority having jurisdiction to identify each fire rated door and frame.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing Products specified in this section with minimum three years documented experience.
- B. Installer: Company specializing in performing work of this section with minimum two years experience.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 00 00 Basic Requirements: Requirements for transporting, handling, storing, and protecting products.
- B. Accept units on site in manufacturers standard packaging. Inspect for damage.
- C. Protect units from damage by storing in dry, protected area.

1.8 FIELD MEASUREMENTS

A. Verify field measurements prior to fabrication.

1.9 COORDINATION

- A. Section 01 00 00 Basic Requirements: Requirements for coordination.
- B. Coordinate work with door opening construction and door hardware installation.
- C. Owner shall furnish & install door lockset & core.

1.10 WARRANTY

A. Section 01 00 00 - Basic Requirements: Requirements for warranties.

PART 2 PRODUCTS

2.1 PRE-ASSEMBLED STEEL DOORS AND FRAMES

- A. Manufacturers:
 - 1. Dominion Products.

- 2. Secural Doors.
- 3. Total Door Systems.
- 4. Approved equal.

2.2 DOOR FRAMES

- A. Metal Frames: 18 gage steel sheet, fire rated for 90 minutes.
- B. 5¾" by 7'4" masonry frame to match existing unit in Large Pod 4K.
 - 1. Field verify measurements prior to fabrication / purchase.

2.3 COMPONENTS

A. Steel Sheet: Galvanized to ASTM A653/A653M A60.

2.4 HARDWARE

- A. Hinges: Steel, full mortise ball bearing type.
- B. Thresholds: Adjustable or extruded aluminum, thermally broken.
- C. Closer: LCN model to match existing unit in Large Pod 4K.

2.5 ACCESSORIES

A. Primer: Manufacturer's standard rust inhibitive type.

2.6 FABRICATION

- A. Fabricate doors and frames as pre-hung split jamb units.
- B. Fabricate pre-hung units with hardware reinforcement welded in place.
- C. Door to be 28"; size to match existing unit in Large Pod 4K.
- D. Backset shall be 23/4".

2.7 FACTORY FINISHING

- A. Doors and Frames:
 - 1. Primer: Baked on dry powder.
 - 2. Owner to apply finish coat of paint.
- B. Hardware Finish:
 - 1. Steel Components: Satin chrome plated.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01 00 00 Basic Requirements: Coordination
- B. Instructions to Bidders Section (verification of existing conditions before starting work).
- C. Verify framed openings are correct size and thickness and project conditions are acceptable.
- D. Correct unacceptable conditions before proceeding with installation.

3.2 PREPARATION

A. Apply one coat of bituminous paint to interior of metal frames to be in contact with cementitious materials.

3.3 INSTALLATION

- A. Install units in accordance with manufacturers installation instructions.
- B. Install doors and frames plumb, level and square.
- C. Anchor door frames securely.
- D. Build partition separate work areas from inmate occupied areas, to prevent distribution of dust and moisture into occupied areas. All partition erection, related masonry work, door installation, clean up & partition removal to be completed in one day.
- E. Coordinate installation of door & hardware with Owner.
- F. Section 01 00 00 Basic Requirements: Interior Enclosures.

3.4 ADJUSTING

- A. Section 01 00 00 Basic Requirements: Requirements for starting and adjusting.
- B. Adjust door and frame units to ensure smooth and balanced movement.

END OF SECTION

SECTION 09 67 00

FLUID APPLIED RESILIENT (RESINOUS) FLOORING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes fluid applied resilient seamless flooring system.

1.2 REFERENCE

A. Applicable provisions of Division 01 govern work under this Section.

1.3 REFERENCE STANDARDS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

B. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- 1. ASTM C 307-99 Tensile strength of chemical-resistant mortars, grouts and monolithic surfacing
- 2. ASTM C 501-84 (R2002) Relative resistance to wear of unglazed ceramic tile by Taber Abrasion
- 3. ASTM C 531-00 Linear shrinkage and coefficient of thermal expansion of chemical-resistant mortars, grouts and monolithic surfacing
- 4. ASTM C 579-01 Compressive strength of chemical-resistant mortars, grouts and monolithic surfacing
- 5. ASTM C 580-98 Flexural strength and modulus of elasticity of chemical resistant mortars, grouts and monolithic surfacing
- 6. ASTM D 696-98 Coefficient of linear thermal expansion of plastics
- 7. ASTM D 570-98 Water absorption of plastics
- 8. ASTM D 2047-99 Static coefficient of friction of polish coated floor surfaces
- 9. ASTM D 2794-93 (R1999) Resistance of organic coatings to impact
- 10. ASTM D 4541-02 Pull off strength of coatings using portable adhesion testers
- 11. ASTM E 84-01 Surface burning characteristics of building materials
- 12. ASTM E 648 Critical radiant flux of floor covering systems using a radiant heat source
- 13. ASTM E 662 Specific optical density of smoke generated by solid materials

1.4 SUBMITTALS

A. Instructions and Manufacturer's "Directions for Application".

B. Qualifications of Installers

1. Submit a written statement from the floor manufacturer stating that the installer is certified and acceptable.

- C. Samples
 - 1. Submit cured samples of each floor finish or color combination.
- D. Maintenance Instructions
 - 1. Submit manufacturer's recommendations for cleaning and maintenance.

1.5 DELIVERY AND STORAGE

A. Deliver the materials to the project site in unopened 5 gallon containers clearly labeled with the manufacturer and type of material. Store materials away from fire or sparks. Maintain the storage area at a minimum of 50°F.

1.6 ENVIRONMENTAL CONDITIONS

A. Maintain the ambient room temperature at 70°F or above for a period of 24 hours before installation and during the installation and curing times. Do not apply if the floor temperature is below 50°F. See Manufacturer's Directions for Application. Concrete to receive surfacing shall have been cured for at least 28 days per inch of thickness and shall have been free of water for at least 7 days. Concrete moisture should not exceed 5 lbs per 1000 square feet. Wood substrates shall have a measured moisture content of no more than 10 percent prior to application.

1.7 PROTECTION

A. Protect adjacent surfaces not scheduled to receive the flooring by masking or by other means to maintain these surfaces free of the flooring materials. Protect the installed and cured flooring by covering with 30 pound building paper or by other equally effective means until final acceptance of the project.

PART 2 PRODUCTS

2.1 EPOXY FLOOR COVERINGS

- A. Manufacturers:
 - 1. Phoenix One-Step Epoxy Flooring System.
- B. Epoxy should be approved under MIL-Spec MIL-D-24613 Type III and be 100% solids, non-toxic containing no solvents or thinners. Rock to resin ratio must be less than 3lbs of aggregate per pound of epoxy resin (excluding top coat).

2.2 AGGREGATE

A. Select the desired color patterns consisting of marble, silica sand and quartz.

2.3 TOP COATING

A. If desired, a top coat consisting of the manufacturer's MIL-Spec approved epoxy can be installed either as a clear coating or pigmented your choice of solid color.

2.4 PHYSICAL PROPERTIES

A. Properties Table:

Properties Table:		T	
Compressive Strength	ASTM C-579	17,800 psi after 7 days	
Tensile Strength	ASTM C-307	7,100 psi after 7 days	
Flexural Strength	ASTM C-580	10,000 psi after 7 days	
Coefficient of Linear	ASTM D-696	2.5 x 10 ⁻⁵	
Expansion			
Adhesion Strength	ASTM-D-4541	> 500 psi with 100% concrete failure	
Flame Spread	MIL-D-24613,	Passed	
	MIL-STD-1623		
	ASTM E-84	< 3 Class A	
Flammability	ASTM D-570	Self Extinguishing	
Critical Rad Flux	E-648	$>1.07 \text{ w/cm}^2$	
Smoke Developed	MIL-D-24613,	Passed	
	MIL-STD-1623		
Smoke Density	ASTM E-662	< 3	
Abrasion Resistant	MIL-D-24613,	42 mg	
	MIL-STD-1623		
	ASTM C-501	18 mg	
Impact Resistant	MIL-D-24613	No cracking or delamination	
	ASTM D-2794	> 24,000 psi	
Odor	ASTM D-2794	Free from objectionable odors	
Indentation	ASTM D-2794	Shall not exceed 1%	
		Results 0.8%	
Temperature	ASTM D-2794	150-200°F; No visible softening,	
Resistance		cracking or delaminating	
Weight	ASTM D-2794	1.2 lbs/ft ² @ 1/8" thickness	
Linear Shrinkage	ASTM C-531	< 0.02%	
Water Absorption	ASTM D-570	< 0.2%	

B. ASTM D 2240

Hardness, @ 14 days Shore D 80

C. 2.1.4.16 Slip-Resistance Properties

- 1. ASTM D-2047
- 2. ADA Compliant
- 3. With one coat of sealer:

<u>Static</u>	<u>Dry</u>	Wet	Oily
Leather	0.85	1.05	
Rubber	0.94	1.10	0.55

Sliding	Dry	Wet	Oily
Leather	0.58	0.74	
Rubber	0.67	0.72	0.41

- D. Chemical Resistance @ 25°C (77°F) after curing 7 days
 - 1. Although product is considered to have excellent chemical resistance, this is a general term. Specific chemicals not listed and concentrations and amount of time the said chemicals will be in direct contact can be calculated and reported if requested. This table represents a list of most commonly used materials:

Duration in weeks	1	2	4	8
Distilled water	+	+	+	+
Sea water	+	+	+	+
Sulfuric acid, 30%	+	+	+	+
Sulfuric acid, 70%	+	+	+	+
Hydrochloric acid, 10%	+	+	+	+
Hydrochloric acid, 20%	+	+	+	+
Acetic acid, 5%	+	+	+	+
Ammonia, 10%	+	+	+	+
Toluene	a	a	a	a
MIBK	a	a	a	a
Ethanol, 50%	a	d	d	d
Gasoline, high test	+	+	+	+
Pine oil	+	+	+	+

+ = Resistant Film thickness: 12 – 16 mils

a = Affected Cure Schedule 7 days @ 21° C (77°F)

d = Destroyed Substrate, Sandblasted steel

PART 3 EXECUTION

3.1 SURFACE PERPARATION

- A. Resinous floor systems should not be installed over loose resilient tile or sheet flooring. If existing concrete substrates are badly cracked, crumbling, or deeply contaminated with oil or fat, a new concrete topping of proper thickness and strength should be applied. Wood floors that are poorly supported, badly worn, splintered, grease or oil soaked should be renovated prior to application of resinous flooring.
- B. Completely remove all dirt, dust, debris, paint, laitance, grease, oil, animal fats and loose particles by; sanding, sandblasting, chipping, bush hammering, wire brushing or high pressure water blasting. Substrate should then be rinsed, squeeze-dry mopped and allowed to dry.
- C. Wood surfaces should be sanded to remove all latent contaminants, then swept and vacuumed. Joints should be filled with an elastomeric compound and covered with reinforced fiberglass tape to help prevent cracking. An elastomeric membrane may also be glued to the entire floor prior to installation of the floor system, again to reduce the

- probably of cracks developing as a result of movement commonly associated with wood floors.
- D. Remove any loose areas of substrate, chip out swollen or cracked areas. Then fill any cracks, joints or other depressions with an epoxy underlayment as recommended by the manufacturer to be compatible with the floor surfacing material.
- E. See Manufacturer's Directions For Application for complete instructions.

3.2 MIXING AND APPLICATION

- A. Mixing and application of the flooring material, underlayment and any desired top coat should be done in strict compliance with the Manufacturer's Directions for Application.
- B. Only applicators Certified and Verified in writing by Phoenix Epoxy Systems, Inc., should be allowed to install product and a manufacturer's representative must be on-sight during installation.

3.3 WARRANTY

A. Phoenix Epoxy Systems offers a full year limited warranty on materials from date of purchase. Warranty will provide free material replacement of the product in the event that Phoenix Epoxy Systems, Inc., materials prove defective and provided materials are installed in strict compliance of Phoenix Epoxy Systems, Inc., "Directions for Application" by a certified applicator.

END OF SECTION



SECTION 09 68 13

TILE CARPET

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Conditions of the Contract and portions of Division One of this Project Manual apply to this Section as though repeated herein.

1.2 SUMMARY

- A. Standard Commercial Carpet.
- B. Transition Strips.
- C. Floor Filler.
- D. Adhesives.

1.3 RELATED WORK

- A. Related Sections include the following:
 - 1. Section 02 41 19: "Selective Demolition" for removing existing floor coverings.
 - 2. Section 09 65 00: "Resilient Flooring" for resilient wall base installed with carpet.

1.4 REFERENCES

- A. Carpet shall be in strict accord with Wisconsin Enrolled Commercial Building Code, Chapter 11 "Accessibility".
- B. Carpet and Rug Institute (CRI).

1.5 SUBMITTALS

- A. Product Data: For the following, including installation recommendations for each type of substrate:
 - 1. Carpet: For each type indicated. Include manufacturer's written data on physical characteristics, durability, fade resistance and printed statement of VOC content.
- B. Samples: For each of the following products and for each color and texture required. Label each Sample with manufacturer's name, material description, color, pattern, and designation indicated on Drawings and in schedules.
 - 1. Carpet: 18x36-inch rectangle, (2) Samples.
 - 2. Exposed Edge, Transition, and other Accessory Stripping: 6-inch long, (2) Samples.

- C. Maintenance Data: For carpet to include in maintenance manuals. Include the following:
 - 1. Methods for maintaining carpet, including cleaning and stain-removal products and procedures and manufacturer's recommended maintenance schedule.
 - 2. Precautions for cleaning materials and methods that could be detrimental to carpet.
- D. Warranties: Special warranties specified in this Section.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is certified by the Floor Covering Installation Board or who can demonstrate compliance with its certification program requirements.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Comply with CRI 104, Section 5, "Storage and Handling."

1.8 PROJECT CONDITIONS

- A. Comply with CRI 104, Section 7.2, "Site Conditions; Temperature and Humidity" and Section 7.12, "Ventilation."
- B. Environmental Limitations: Do not install carpet until wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for Project when occupied for its intended use.
- C. Floors must be free of dust, oils, grease, or other foreign matter.
- D. Allow installation to cure for a minimum of 24 hours before subjecting it to any traffic, moving of furniture, or other heavy equipment.

1.9 WARRANTY

- A. Special Warranty for Carpet: Manufacturer's standard form in which manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period.
 - 1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.
 - 2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, and delamination.
 - 3. Warranty Period: Lifetime.

1.10 EXTRA MATERIALS

A. Furnish extra materials described below, before installation begins, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Carpet: Full-sized Tiles equal to 5 percent of amount installed for each type indicated, but not less than 10 sq. yd.

PART 2 PRODUCTS

2.1 STANDARD COMMERCIAL CARPET TILES

- A. Products: Subject to compliance with requirements, provide one of the following:
 - 1. Carpet Tile:
 - a. Carpet Tile (select any one)

Manufacturer: Shaw Contract Group			
Collection:	18X36	Unearthed	Phases
Style:	Overlay Tile,	Mica, 5T014	Migrate Tile,
	59598		5T075
Color:	Layered, 95761	Smoky Quartz,	Illusion, 73761 or
		14761	Gauze, 73105
Backing:	Ecoworx® Tile	Ecoworx® Tile	Ecoworx® Tile

B. Characteristics: All carpet shall be same mill run throughout.

2.2 INSTALLATION ACCESSORIES

- A. Trowelable Leveling and Patching Compounds: Latex-modified, hydraulic-cement-based formulation provided or recommended by carpet manufacturer.
- B. Adhesives: Water-resistant, mildew-resistant, non-staining pressure sensitive type to suit products and subfloor conditions indicated, that complies with flammability requirements for installed carpet and is recommended or provided by carpet manufacturer.
 - 1. VOC Limits: Provide adhesives that comply with the following limits for VOC content when calculated according to 40CFR 59, Subpart D (EPA Method 24).
- C. Transition Strip:
 - 1. Carpet to Concrete
 - a. Johnsonite CTA-XX-J.
 - b. Color as selected by Architect from manufacturer's full line.
 - 2. Carpet to Resilient
 - a. Johnsonite CTA-XX-A.
 - b. Color as selected by Architect from manufacturer's full line.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for maximum moisture content, alkalinity range, installation tolerances, and

- other conditions affecting carpet performance. Examine carpet for type, color, pattern, and potential defects.
- B. Concrete Subfloors: Verify that concrete slabs comply with ASTM F 710 and the following:
 - 1. Slab substrates are dry and free of curing compounds, sealers, hardeners, and other materials that may interfere with adhesive bond.
 - a. Determine adhesion and dryness characteristics by performing bond and moisture tests recommended by carpet manufacturer.
 - 2. Subfloors are free of cracks, ridges, depressions, scale, and foreign deposits.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. General: Comply with CRI 104, Section 7.3, "Site Conditions; Floor Preparation," and with carpet manufacturer's written installation instructions for preparing substrates.
- B. Use trowelable leveling and patching compounds, according to manufacturer's written instructions, to fill cracks, holes, depressions, and protrusions in substrates. Fill or level cracks, holes and depressions 1/8 inch wide or wider, and protrusions more than 1/32 inch, unless more stringent requirements are required by manufacturer's written instructions.
- C. Remove coatings, including curing compounds, and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, without using solvents. Use mechanical methods recommended in writing by carpet manufacturer.
- D. Broom and vacuum clean substrates to be covered immediately before installing carpet.

3.3 INSTALLATION

- A. Comply with CRI 104 and carpet manufacturer's written installation instructions for the following:
 - 1. Direct-Glue-Down Installation: Comply with CRI 104, Section 9, "Direct Glue-Down Installation."
- B. Maintain uniformity of carpet direction and lay of pile. At doorways, center seams under the door in closed position.
 - 1. It door openings install adapters/transitions/reducers to be covered by door when in the closed position.
 - 2. Level adjoining border edges.
- C. Do not bridge building expansion joints with carpet.
- D. Cut and fit carpet to butt tightly to vertical surfaces, permanent fixtures, and built-in furniture including cabinets, pipes, outlets, edgings, thresholds, and nosings. Bind or seal cut edges as recommended by carpet manufacturer.

- E. Install metal transition strip with anchoring leg under carpet where carpet abuts resilient terrazzo tile.
 - 1. Secure metal transition strip to substrate according to manufacturer's instructions.
- F. Extend carpet into toe spaces, door reveals, closets, open-bottomed obstructions, removable flanges, alcoves, and similar openings.
- G. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating on finish flooring as marked on subfloor. Use nonpermanent, non-staining marking device.
- H. Install pattern parallel to walls and borders to comply with CRI 104, Section 15, "Patterned Carpet Installations" and with carpet manufacturer's written recommendations.
- I. All selvages shall be trimmed to ensure good side seams. All seams shall receive an 1/8" continuous bead of seam adhesive at the point the face yarn enters the back.
 - 1. Fit edges together with an invisible seam and bond with appropriate adhesive.

3.4 CLEANING AND PROTECTING

- A. Perform the following operations immediately after installing carpet:
 - 1. Remove excess adhesive, seam sealer, and other surface blemishes using cleaner recommended by carpet manufacturer.
 - 2. Remove yarns that protrude from carpet surface.
 - 3. Vacuum carpet using commercial machine with face-beater element.
- B. Protect installed carpet to comply with CRI 104, Section 16, "Protection of Indoor Installations."
- C. Protect carpet against damage from construction operations and placement of equipment and fixtures during the remainder of construction period. Use protection methods indicated or recommended in writing by carpet manufacturer and carpet adhesive manufacturer.

END OF SECTION

